

**APPARATUS AND METHOD FOR BEARING LUBRICATION IN TURBINE
ENGINES**

ABSTRACT OF THE DISCLOSURE

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A lubrication system includes an inlet conduit having an inboard end attached to a bearing support and an outboard end for receiving lubricant. A lubricant inlet assembly is attached to the inlet conduit outboard end and has an inlet cap with a receptacle, an inlet cap body, and a cap base. The inlet receptacle is
10 configured to mate with a lubricant supply line, where the inlet cap body has an outer cap enclosing an inner cap, the outer cap having a convoluted wall. An inlet conduit termination fitting has an outboard fitting section, with an o-ring in a circumferential groove, disposed inside the inlet cap, and an inboard fitting section attached to the inlet conduit outboard end. A cap heat shield encloses
15 the inlet cap and a conduit heat shield is attached to the inlet conduit. The lubricant inlet assembly is mounted to an engine casing with a low-conductivity insulating gasket between the cap base and the engine casing.